NO. 52.

BULLETIN OF FOREIGN PLANT INTRODUCTIONS.

November 16 to 30, 1910.

NEW PLANT IMMIGRANTS.

ARACHIS HYPOGAEA. (Fabaceae.) 28929. Seeds of peanut from Kia-ying chau, China. Presented by Mr. George Campbell. "These seem to be more drought resistant than some received from the States. The plants also have a running habit." (Campbell.) For distribution later.

GOSSYPIUM SPP. (Malvaceae.) 29028-030. Cotton seed from Marash, Turkey. Presented by Mr. Paul N. Nersessian. No. 29028. "This branches out more and grows larger than the last variety (S. P. I. No. 29030), the bolls are larger and the lint cotton from a given weight of bolls is much more, but the yield of bolls from a given area is much less than the aforementioned variety. It may yield more bolls in another locality or the cause of its short yield may be found and remedied, then of course, it will be the best of all. This variety we call Besny or Gaga." (Nersessian.) No. 29029. "This variety we call Constantinople. It grows larger, branches out more like a tree, requires richer land, is sown about two weeks earlier and matures earlier, and needs more water or irrigating than the others. The bolls open wide apart and shed out the lint cotton if not picked in time." (Nersessian.) No. 29030. See under No. 29028. For distribution later.

ILEX PARAGUARIENSIS. (Aquifoliaceae.) 29097. Seed of yerba mate tree grown near the boundary line of Brazil and Paraguay. Presented by Mr. C. F. Mead, Cahi Puente, Paraguay. "This plant is known here as yerba and the forests where it is found are called yerbales. There are many varieties hereabouts, but I was lucky enough to be able to purchase seed of the best kind. The seed when planted will take three months to germinate, but if the whole fruit is planted, three years are necessary. Plant in nursery first, then transplant, spacing 10 feet apart for square method. When full grown the tree is from 30 to 40 feet high. As near as I can find out the method of preparing for market is to pick the leaves, partly dry by fire, finish drying in the sun, and then break up fine with a kind of flail, when it is ready to sack and market. The flavor of yerba is regulated by variety, the strength by years of growth and methods of preparation. The yield of yerba is about 3 kilos per tree when 3 years old, 6 kilos per tree second crop, and a gradual increase then until full grown when 25 to 35 kilos can be cut every three years. Yerba sells in Buenos Aires for $1.15 Arg. (about 50 cents gold) per kilo." (Mead.) For immediate distribution.

MELINIS MINUTIFLORA. (Poaceae.) 29100. Seeds from Brazil. Presented by Dr. Orville A. Derby, Servico Geologico e Mineralogico do Brazil, Rio de Janeiro. "The species of grass Panicum melinis (Melinis minutiflora) occurs in at least two distinct varieties: capim catingueiro roxo and catingueiro claro. A variety has been found at Petropolis, but as I had no opportunity to see this variety I think it is an adaptation to the different conditions of humidity in the mountains." (Alberto Lofgren, Director, Botanical Garden, Sao Paulo, Brazil.) For distribution later.

NICOTIANA TABACUM. (Solanaceae.) 29091. Tobacco seed grown on the Santa Maria plantation, 12 miles east of the city of Pinar del Rio, and in the Vuelta Abajo, Cuba. Presented by Mr. H. H. Norton, Consolacion del Sur, Cuba. "I believe there is only one variety of tobacco grown in Cuba and that the different types are the results of different soils, climate and the methods of cultivation and curing." (Norton.) Introduced as were the two following for testing its resistance to the so-called Granville tobacco wilt, now threatening the North Carolina tobacco industry. For distribution later.

NICOTIANA TABACUM. (Solanaceae.) 28092-093. Tobacco seed from Cuba. Presented by Mr. Francisco A. Montero, Santa Clara, Cuba. No. 28092. Remedios. From the district surrounding the town of this name, Province of Santa Clara. No. 29093. Yara. From the district in the vicinity of the town of this name, Province of Oriente, 16 miles east southeast of Manzanillo. For distribution later.

PASSIFLORA EDULIS. (Passifloraceae.) 28826. Seeds of passion fruit from Melbourne, Australia. Presented by Mrs. Alexander Graham Bell, Washington, D. C. "Passion fruit will grow in the States; they prefer a loose sandy soil, but must be high enough up to be out of reach of frosts, near the sea for preference within, say, 10 miles. They require plenty of manure and to be grown on a wire trellis, that is, an ordinary fence with posts 15 feet apart and in place of having the wire as in the fence, nail a cross-piece about 18 inches long on the top of each post and run two wires along this cross-piece. Train the vine up by main stem until the wires are reached, then run an arm out each side along the wires. The lateral growth will hang down like a curtain and the fruit is borne on this lateral growth. Plant vines 15 feet apart, one between each post; train vine up a stick until it reaches the wire. Rows to be 15 feet apart; the best manure for them, 15 cwt. to the acre, 7 bonedust, 5 superphosphate, 3 potash. If the winter be fairly warm, a winter crop can be grown by pruning in late spring or early summer by cutting off the lateral growth a foot below the wires and then manuring, but if the winter is not mild I would simply go in for

the natural summer crop, prune as above late in winter and manure early in spring. The vines are raised in seed boxes from seed. Simply wash the pulp out of the fruit and dry the seed; plant out when about 6 inches high. Do not allow any lateral growth until the wires are reached. We plant out here in Australia about the end of September or beginning of October. Shelter young plants until they get started. Some fruit will be obtained the first season, full crop the second season. Vines are about done in 4 years. The passion fruit does wonderfully well in the sandstone country around Sydney, yet it grows almost wild in the semi-tropical climate of the Northern Rivers, N. S. W." (Jas. Moody, Toomuc Valley Orchards, Melbourne, Australia.) For distribution later.

PASSIFLORA SP. (Passifloraceae.) 29027. Seeds of passion fruit from near Ambato, Ecuador. Presented by Mr. Herman R. Dietrich, American Consul-General, Guayaquil. "This granadilla fruit was grown a short distance from Ambato, Ecuador. It is frequently shipped to Guayaquil, where it is sold to consumers at about three and one-third cents apiece, Ecuadorian currency." (Dietrich.) For distribution later.

PASSIFLORA SP. (Passifloraceae.) 29090. Seeds of granadilla from Acapulco, Mexico. Presented by Mr. Marion Letcher, American consul. For distribution later.

PASSIFLORA SP. (Passifloraceae.) 29048. Seed of passion fruit from Bolivia. Presented by Mr. Alexander Benson, Charge d'Affaires ad interim, La Paz, Bolivia. "These granadillas were purchased on the open market. As you doubtless are aware, La Paz is surrounded by desert, barren country, and all fruits which are brought to the market are brought on the backs of donkeys from the Yungas country." (Benson.) For distribution later.

PYRUS SP. (Malaceae.) 29050. Seeds of pear from Manchuria. Purchased from Mr. Edward C. Parker, agriculturist, Bureau of Agriculture, Industry and Comerce, Mukden, Manchuria. "Mixed varieties. Native habitat, Kwang-ning district, Manchuria, 42 degrees N. latitude. These varieties are very resistant to drying winds, sunscald, blight, etc. Valuable in America as hardy grafting stocks." (Parker.) For distribution later.

ROSA SP. (Rosaceae.) 29096. Plant of rose from Orleans, France. Presented by Mr. Leon Chenault and Son, nurserymen. "Etoile du Portugal, the new hybrid of Rosa gigantea. As this variety has not yet proved to be quite hardy it would be preferable to plant it in a cool greenhouse or in a conservatory where it would grow beautifully." (Chenault.) For distribution later.

SOLANUM SP. (Solanaceae.) 29049. Tubers of potato collected on the Morro Solar mountain near Chorillos, near Lima, at about 200 meters altitude, among the rocks of a talus slope. Presented by Dr. A. Weberbauer, German Legation, Lima, Peru. "The plant from which these tubers were procured is closely related to Solanum maglia, differing from it however in that the flowers are not uniformly violet but often bear violet stripes on a white ground." (Weberbauer.) For distribution later.

TRITICUM DICOCCUM DICOCCOIDES. (Poaceae.) 29026. Seed of wild wheat from Palestine. Presented by Mr. A. Aaronsohn, Director, Jewish Agricultural Experiment Station, Haifa, Palestine. See B. P. I. Bulletin No. 180 for description. "I believe that you will do well to sow a part of this as winter wheat in the Southwest. The wild wheat sown at Bonn, Germany, last October, survived the winter perfectly, as I could see for myself last May when I visited there." (Aaronsohn.) For distribution later.

NOTES FROM FOREIGN CORRESPONDENTS.

CHILE. Limavida. Mr. Jose D. Husbands writes October 22-23 giving full accounts of the Elqui and Huasco raisins, as well as the famous Pisco brandy, so well known on the Pacific Coast. Will make new attempts to secure the Linge seeds. "Will take moss to the Cordilleras and let the seeds drop from the tree into it."

CHINA. Northwest Yunnan. Mr. George Forrest writes October 2 that he has had a very bad season on account of the record rainfall, but has secured for us some good Rubi, some maize from the Salwin valley, and a quantity of seed of the "Kou shu" or tree of which the excellent white paper of Lichiang and Hoching is made. Expects to sail for home February 4 from Rangoon.

FRANCE. Nice. Dr. A. Robertson-Proschowsky writes November 15 that he is watching for Medicagos and will send them as soon as secured. Not a good season now for securing slips of Opuntia gymnocarpa, but will get them in future.

INDIA. Calcutta. Mr. W. R. Smith, Superintendent of the Royal Botanical Gardens writes October 31, that he has asked correspondents for seeds of Pueraria thomsoni and P. tuberosa, and will send them when received.

INDIA. Gonda. Rev. N. L. Rockey writes October 28 that he will send the mango seeds requested in June or July. Is sending a small parcel of custard apple and pomelo. Suggests Doob grass (Cynodon dactylon) as a worthy grass for culture.

JAMAICA. Kingston. Mr. William Harris, Superintendent of Public Gardens, writes November 17 that he is getting together for us three chayotes, all that are recognized there, dark green, light green, and milky white, and will send them as soon as he gets them.

LIBERIA. Monrovia. Mr. E. L. Parker, Commissioner of Agriculture, writes October 30 that he will send the seeds of the Bobo abi (Thaumatococcus danielli) as soon as he can secure them.

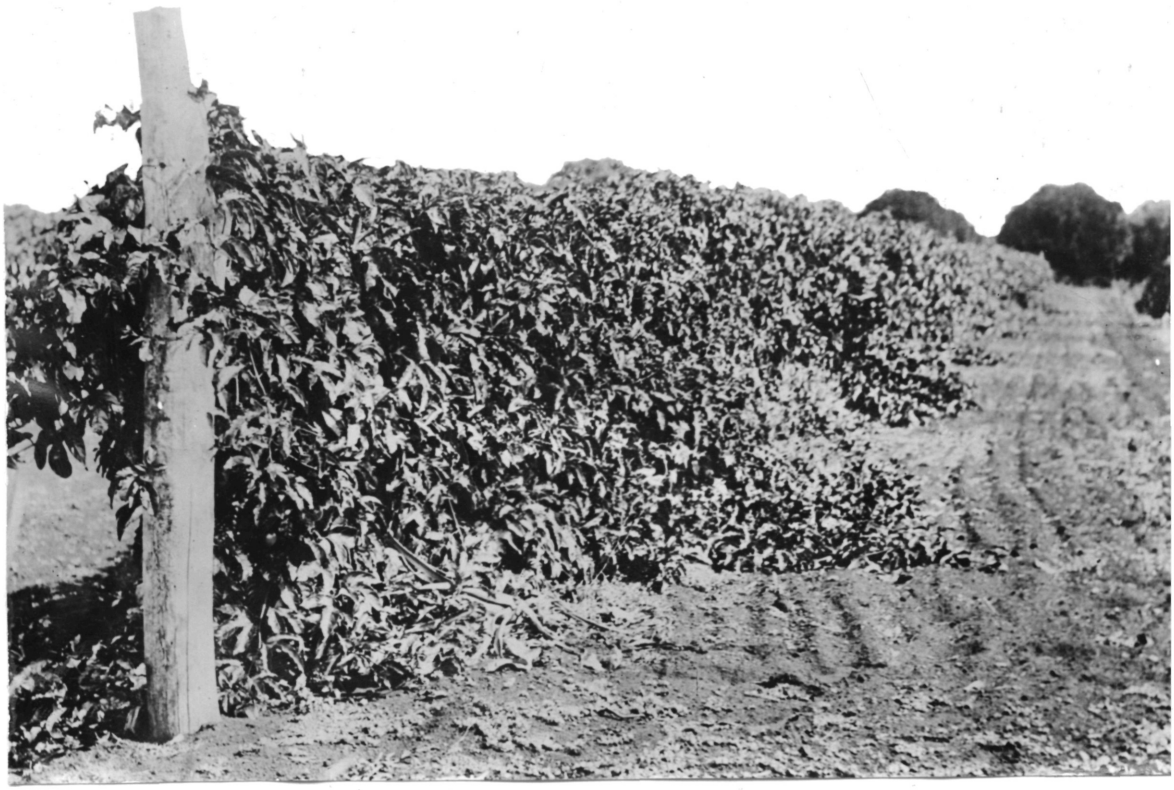
MANCHURIA. Mukden. From Edward C. Parker, Agriculturist of the Bureau of Agriculture, Industry and Commerce, under date November 18, we hear that he has sent out a man to collect seeds of the Manchurian wild asparagus for us. He is trying through correspondence to secure soy bean samples for us. Of his trials with corn he writes: "I planted about 10 acres of American corn on spring plowing in a dry spring (first time the land had ever been plowed with a foreign plow) and had to use seed that was 3 years old and badly weevil eaten. No manure was available also. In spite of these handicaps the American varieties yielded from 47.4 to 61.7 bushels per acre, shelled corn. I intend to grow 100 bushel cron in Manchuria next year or know the reason why."

Mexico. Mexico City. Dr. Pehr Olsson-Seffer writes November 29 that he is having one of his field men secure all the information possible regarding the tobaccos of Tepic, and is sending us seed from the District of Mascota, in Jalisco.

MEXICO. Tepic. Ixtlan del Rio. Mr. Alfred Lonergan writes November 30 that he is trying to obtain for us seed from the Compostela tobacco district as that is the best obtainable on the west coast. He is also trying to obtain seed from the Santiago River region, where considerable tobacco is raised.

NATAL. Durban. Under date November 3 Mr. J. Medley Wood, Director of the Natal Botanic Gardens, writes that they will send us seed of the native asparagus as soon as it is obtained. He says, "Affairs in regard to this Institution are at present in a very unsettled state. The probability is that the Herbarium will eventully be taken over by the Union Government and the Botanic Gardens will be handed over to the Municipality of Durban, but nothing will be done for some time yet."

RHODESIA. Salisbury. Mr. H. Godfrey Mundy offers November 2 to send us "seed of Parimarium mabola, Dovyalis sp. and Carissa edulis, var. tomentosa, all of which produce edible plum-like fruits."



PASSIFLORA EDULIS. THE PASSION FRUIT.

The passion fruit growing as a crop plant in Queensland, Australia, from a photograph furnished to Vice Consul-General Henry D. Baker by the Agricultural Department of Queensland, and by him forwarded in connection with a report made at the suggestion of Mr. Alexander Graham Bell on the cultivation of this fruit in Australia. The passion fruit can be grown like a grape on trellises, and may be grown from seed or cuttings. Grows well in any ordinary open soil if well manured. Profits are reported to run from $100 to nearly $300 per acre annually, and the cultivation is very simple. The vines should be renewed after five years. Hence it is often used as a catch crop in young orchards, being removed as the fruit trees come into bearing. Might be used thus to advantage in Southern Florida and California. May also perhaps be advantageously crossed with the native American edible species, Passiflora incarnata, the fruit of which is known as may-pops.

PASSIFLORA EDULIS. THE PASSION FRUIT.

Near view of passion fruits grown on trellis. The fruits are as large as a large hen's egg, of a rich purple color, and the pulp is much used in Australia for flavoring ices, in the preparation of fruit salads, for confectionery, for icing cakes and other dishes, for "trifles", an Australian dish composed of sponge cake, fruits, cream and white of eggs mixed, for jams, and other table purposes. May also be eaten in the natural state, the pulp being removed with a spoon and eaten seeds and all, but the seeds are removed when used in syrups, ice creams, etc. May prove of value for the manufacture of syrups, for soft drinks, although the small amount of juice in each fruit may be objectionable. Has proven a very interesting and profitable greenhouse fruit in England. From a photograph supplied by Mr. Henry D. Baker, Vice Consul-general, Sydney, in connection with a report on the cultivation of passion fruits in Australia, made at the request of Mr. Alexander Graham Bell.